MTBF - Collider Electrical Power Supply Groups Performance - Polarize Proton Run 6

Average RHIC P.S. Failure Hours per Week (Peter Ingrassia)

fy01-fy02	fy03	fy04	fy05	fy06
18.28	4.36	3.29	2.4	to be determined

Notes:

Lower the number, the better

MTBF of RHIC due to Power Supply Failure

	HERE e+p 1996 (comparison only)	RHIC Run 4	RHIC Run 5	RHIC Run 6
MTBF_M (hours)	22.3	20.48	30.79	40.02
Number of Problems	238	148	138	62

Higher the number, the better.

$$\text{MTBF\_RHIC} = \frac{MT}{NOF}$$

What would be the %AV of RHIC if only RHIC PS Failures

	HERE e+p 1996 (comparison only)	RHIC Run 4	RHIC Run 5	RHIC Run 6
AV%	96.6	91.97	97.09	96.74
Number of Problems	238	148	138	62

Higher the number, the better.

$$AV\% = \frac{[MT - (NOF \times TOR)]}{MT} \times 100$$

MTBF of an Individual Power Supply System Failure

	HERE e+p 1996 (comparison only)	RHIC Run 4	RHIC Run 5	RHIC Run 6
MTBF (hours)	29310	19106	27989	37338
Number of P.S.'s	1166	909	909	933

Higher the number, the better.

$$\text{MTBF\_RHIC PS} = \frac{(MT \times NOPS)}{NOF}$$